

Office Action Summary

Application No. 09/108,705	Applicant(s) Motoyama
Examiner Madeleine AV Nguyen	Group Art Unit 2722

Responsive to communication(s) filed on Jun 16, 2000

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

Claim(s) 37-48 and 70-77 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 37-48 and 70-77 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on June 16, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/108,705 is acceptable and a CPA has been established. An action on the CPA follows.

Applicant amends the specification, claims 37-48, adds new claims 49-56 which are renumbered as claims 70-77 respectively.

Response to Applicant's Remarks

2. Applicant remarks that Allen et al does not disclose or suggest the second device determining the recited second information utilized by the first device, and the second device parsing the transmitted information using the second information which has been determined, but instead only discloses using a predetermined hardware level standard transmission protocol such as RS-232 for transmission of information.

Allen teaches in Fig. 1 a first device including the reproduction apparatus 1 and the communications interface 6, the second device as the diagnostic and administrative device 5. The first device and the second device can communicate through communication lines by using RS-232 for digital data or by using modem 4 for analog data. Allen teaches "a communication interface in said reproduction apparatus including means for collecting data regarding operation of

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said reproduction apparatus and for permitting said data to be output from said apparatus, said data comprises reproduction apparatus usage, utilization of features of such reproduction apparatus and billing data storage in said internal memory, said communication interface further including modem means for transmitting said data from said communication interface to a non-dedicated telephone line; and a diagnostic and administrative device including data reception means for receiving said data from the telephone line or directly from said communication interface." (Col. 5, line 54 - col. 6, line 4). Thus the first device sends first information including data related to the reproduction apparatus use, feature utilization of the reproduction apparatus, paper consumption, error history and billing data (col. 4, lines 56-59) to the second device. The second device determines second information utilized by the first device from the reproduction apparatus use, feature utilization of the reproduction apparatus wherein the second information is a first portion of the first information. The second device then parses the second portion of the first information such as the error history and billing data, wherein the second portion is different from the first portion, and diagnoses a condition of the first device by the second device using the second portion which has been parsed. Thus, Allen does teach the claimed invention.

The rejection of claims 37-48, 70-77 is modified according to the amended claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skills in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 37- 48, 74-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al (US Patent No. 5,394,458).

Concerning claims 37, 43, 77, Allen et al disclose a reproduction system and method (Figs. 1-2) of diagnosing a first device (1 and 6) by a second device (5), which has an ability of diagnose different types of devices, wherein the first device includes a communication interface 6 for transmitting information from a reproduction apparatus 1 to the second device (an administrative device 5) which identifies a type of the reproduction apparatus 1 (type of first device), initializes a status database 20, and selects a symptom to diagnose the reasons and probabilities (condition) of the reproduction apparatus 1, (col. 5, lines 7-36). The information is transmitted from the reproduction apparatus to the administrative device 5 via a telephone network and a modem 4, or a standard RS-232 protocol (col. 3, line 30 - col. 4, line 7). The system and method comprises means or steps for transmitting, through a communication line (public phone lines or data line, Fig.1), first information (col. 4, lines 56-59) from the first device (1, 6) to the second device 5; receiving by the second device 5, the first information which has been transmitted; determining by

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the second device 5, second information (such as data related to the reproduction apparatus use, feature utilization of the reproduction apparatus) utilized by the first device, wherein the second information is a first portion of the first information; parsing, by the second device, a second portion of the first information (such as the error history and billing data) using the second information which has been determined, wherein the second portion is different from the first portion; and diagnosing a condition of the first device by the second device using the second portion which has been parsed.

Allen does not directly teach that the communication lines between the first device and the second device are communication channel. However, Allen teaches that “communication may be effected either directly via the RS-232 interface 3 or via the telecommunication modem 4.” (Col. 3, lines 32-34). RS-232 interfaces includes a serial data port and data line with additional input and output control and/or status lines. Modem 4 converts a digital signal into a modulated analog signal capable of being transmitted over a standard (public) non-dedicated telephone line (col. 3, lines 36-50). Thus the first device transmits information to the second device through a communication channel of the data line connected to the RS-232 or the public phone lines connected to the modem 4 wherein both of the communication lines are equivalent to communication channels. In addition, Allen does not specifically mention that the first information includes first portions and second portion. However, since Allen teaches the first information sent from the first device to the second device includes a plurality of different information which can be divided into 2 portions wherein the first portion can be considered as

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data related to the reproduction apparatus use, feature utilization of the reproduction apparatus since the first device utilizes these information for operating the reproduction apparatus, and the second portion can be considered as the error history and billing data for the second device to diagnose the condition of the first device. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to consider the communication lines in Allen are communication channels since the first and second devices transmit and receive information through these communication lines, and the received information is divided into two different portions for the second device to determine the information utilized by the first device through the error history and billing data equivalent to the first portion and the information for diagnosing a condition of the first device through the error history and billing data equivalent to the second portion as claimed.

Concerning claims 38-42, 44-48, 75-77, Allen further teaches the means or step of determining by the second device a device identification for the first device (100-102, Fig.2; col.5, lines 18-25); selecting an input format of data stored in a data base and selecting an input format for a facsimile machine and copier machines (102-103; col. 5, lines 21-26).

It is noted that the first device (1, 6) is considered as a copier machine since it includes a reproduction apparatus 1 and a facsimile machine since it can communicate with other remote apparatus through communication lines by the use of the communications interface having a modem 4. In addition, the fact that Allen teaches that the first device can communicate with the second device through different protocol such as RS-232 protocol, or modem protocol inherently

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teaches that the communication system can communicate with different devices having different protocols (col. 3, lines 24-62).

5. Claims 70-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen as applied to claims 37, 43 above, and further in view of Hemmady (US Patent No. 4,872,157)

Concerning claims 70-73, Allen fails to teach that the identification of the type of the first device is a protocol identifier including a header format. Hemmady et al discloses a data processing system for connecting a plurality of inlets to a plurality of outlets comprising a first plurality of terminals connected to one of the plurality of inlets for controlling the storage of header information of each data packet and a second plurality of terminals for processing the header information and queuing data packets destined for a common outlet. Fig.20 shows a message format wherein the header 610 consists of the destination address 612, the source address 614, the group identifier 616, group name 618, the type of service 620, a type of service indicator 623, a protocol identifier 624. The header 610 is followed by a header 630 to process message fragmentation. This header 630 includes the protocol identifier 638 for identifying the contents of the internal protocol which is the header of user data 640. Finally, user data 640 may be preceded for appropriate user protocols by the identity of the destination port 642 and source port 644 (col. 62, lines 15-49). Hemmady et al further teaches that a header format of data is contained in the device identification for the first device, and the second device determines the header format of data contained in the device identification by selecting the header format of data

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from a protocol identifier data base (col. 62, lines 15-49). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the protocol identifier with a header format as taught in Hemmady et al in the transmitted information from the first device to a second device in Allen in order for the second device to determine the protocol identifier utilized by the first device since both Allen and Hemmady teach the transmission and reception of data packets from and to different devices thereby permitting both on-site and remote communication with a diagnostic and administrative device for the purpose of recording apparatus usage, feature utilization, and performing diagnostic routines on reproduction apparatus.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine Anh-Vinh Nguyen whose telephone number is (703) 305-4860.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 308-9051 (for formal communication as intended for entry)

(703) 308-9051 (for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

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or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)

A handwritten signature in black ink, appearing to read "AnhVinhNguyen".

Madeleine Anh-Vinh Nguyen
Primary Examiner
Art Unit 2722
August 30, 2000